

XLINKS' MOROCCO-UK POWER PROJECT

Environmental Statement

Volume 2, Appendix 1.6: Otter and Water Vole Survey (Public)

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XLINKS' MOROCCO – UK POWER PROJECT

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Glossary

Term	Meaning
Alverdiscott Substation	The existing National Grid Electricity Transmission substation at Alverdiscott, Devon, which comprises 400 kV and 132 kV electrical substation equipment.
Converter Site	The Converter Site is proposed to be located to the immediate west of the existing Alverdiscott Substation Site in north Devon. The Converter Site would contain two converter stations (known as Bipole 1 and Bipole 2) and associated infrastructure, buildings and landscaping.
Environmental Impact Assessment	The process of identifying and assessing the significant effects likely to arise from a project. This requires consideration of the likely changes to the environment, where these arise as a consequence of a project, through comparison with the existing and projected future baseline conditions.
Environmental Statement	The document presenting the results of the Environmental Impact Assessment process.
HVDC Cables	The High Voltage Direct Current cables which would bring electricity to the UK converter stations from the Moroccan converter stations.
Landfall	The proposed area in which the offshore cables make landfall in the United Kingdom (come on shore) and the transitional area between the offshore cabling and the onshore cabling. This term applies to the entire landfall area at Cornborough Range, Devon, between Mean Low Water Springs and the transition joint bays inclusive of all construction works, including the offshore and onshore cable routes, and landfall compound(s).
Onshore HVDC Cable Corridor	The proposed corridor within which the onshore High Voltage Direct Current cables would be located.
Onshore Infrastructure Area	The proposed infrastructure area within the Order Limits landward of Mean High Water Springs. The Onshore Infrastructure Area comprises the transition joint bays, onshore HVDC Cables, converter stations, HVAC Cables, highways improvements, utility diversions and associated temporary and permanent infrastructure including temporary compound areas and permanent accesses.
Preliminary Environmental Information Report	A report that provides preliminary environmental information in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. This is information that enables consultees to understand the likely significant environmental effects of a project, and which helps to inform consultation responses.
Proposed Development	The element of Xlinks' Morocco-UK Power Project within the UK. The Proposed Development covers all works required to construct and operate the offshore cables (from the UK Exclusive Economic Zone to Landfall), Landfall, onshore Direct Current and Alternating Current cables, converter stations, and highways improvements.
Xlinks' Morocco UK Power Project	The overall scheme from Morocco to the national grid, including all onshore and offshore elements of the transmission network and the generation site in Morocco (referred to as the 'Project').

Acronyms

Acronym	Meaning
BAP	Biodiversity Action Plan
EIA	Environmental Impact Assessment
ES	Environmental Statement
HVDC	High Voltage Direct Current
UK	United Kingdom
Zol	Zone of Influence

Units

Units	Meaning
km	Kilometre
ha	Hectares
m	Metres

1 OTTER AND WATER VOLE SURVEY

To protect the welfare of otters and water vole, information pertaining to the location of these protected species identified following desk based research and field surveys have been removed. A separate version of this technical report containing confidential data is available upon request to those with a legitimate need to view this information.

1.1 Introduction

- 1.1.1 This document forms Volume 2, Appendix 1.6: Otter and Water Vole Survey of the Environmental Statement (ES) prepared for the United Kingdom (UK) elements of Xlinks' Morocco-UK Power Project (the 'Project'). For ease of reference, the UK elements of the Project are referred to as the 'Proposed Development, which is the focus of the ES. The ES presents the findings of the Environmental Impact Assessment (EIA) process for the Proposed Development.
- 1.1.2 This document presents the results of the otter (*Lutra lutra*) and water vole (*Arvicola amphibius*) surveys undertaken in Summer and Autumn 2022 to inform Volume 2, Chapter 1: Onshore Ecology and Nature Conservation of the ES.
- 1.1.3 The survey aimed to:
- undertake a field-based review of all accessible parts of the Onshore HVDC Cable Corridor and Converter Site with appropriate habitats present to search for and record any field signs for these species present; and
 - assess and interpret any field signs identified.
- 1.1.4 The surveys and desk-based assessments undertaken as part of this review and subsequent report, including the Ecological Appraisal Notes, are prepared in accordance with the British Standard for Biodiversity Code of Practice for Planning and Development (BS42020:2013).
- 1.1.5 The design of the Proposed Development has changed since these surveys were undertaken. As such, updated surveys will be carried out (where required) prior to commencement of construction to ensure that all elements of the revised Proposed Development have been considered.

Site Location

- 1.1.6 The Onshore Infrastructure Area is located in north Devon and includes the Landfall, Onshore HVDC Cable Corridor, HVAC Cable Corridors and Converter Site. The Onshore HVDC Cable Corridor is approximately 14.5 km in length and the Converter Site is approximately 39.5 ha. The HVAC Cable Corridors are situated within the boundaries of the Converter Site and Alverdiscott Substation Site.
- 1.1.7 The Onshore HVDC Cable Corridor passes through a mixture of pastoral and arable farm land, with fields bounded by Devon hedgerows, and occasionally crossing small watercourses in wooded valleys. The route also crosses the tidal Torridge estuary.

1.1.8 The location and geographic extent of the onshore elements of the Proposed Development are shown in **Figure 1.1** to **Figure 1.12**.

1.2 Study Area

1.2.1 The onshore ecology and nature conservation study area is detailed within Volume 2, Chapter 1: Onshore Ecology and Nature Conservation of the ES. The study area includes the following.

- Locally designated sites, including Local Nature Reserves and Local Wildlife Sites (LWSs), and less mobile species located within 2 km of the Onshore Infrastructure Area.
- Nationally designated sites, including Sites of Special Scientific Interest (SSSIs) and National Nature Reserves, and records of particularly mobile protected or otherwise notable species (e.g. bat and otter) located within 5 km of the Onshore Infrastructure Area.
- Internationally designated sites located within 12 km of the Onshore Infrastructure Area.

1.2.2 The onshore ecology and nature conservation study area is presented in Volume 2, Figure 1.1 of the ES (see Volume 2, Figures).

1.3 Survey Area

1.3.1 The survey area is defined as the area within which each survey has been undertaken and is based on species or site-specific guidance on the extent of survey required.

1.3.2 The Zone of Influence (Zol) is used to describe the geographic extent of potential impacts of a proposed development. The Zol is determined by the nature of the development and also in relation to designated sites, habitats or species which might be affected by the proposals.

Otter

1.3.3 For the Proposed Development, in addition to the landscape-based appraisal discussed above, given that the presence of otter in this area is widely known, the survey effort focussed on the potential for places of rest for otter, or the presence of field signs indicating the presence of water vole along watercourses crossed by the Onshore Infrastructure Area. The Zol for otter is considered to be the watercourse, banks and areas of adjoining suitable habitat for the creation of holts.

1.3.4 Therefore, the survey area for the otter survey included the watercourses, banks and areas of adjoining suitable habitat within and adjacent to the Onshore Infrastructure Area.

Water Vole

1.3.5 For water vole, the Zol was considered to consist of the banks of watercourses crossed by the route for a distance of 50 m up and downstream. Thus, the survey

area for water vole is defined as the watercourses present within the Onshore Infrastructure Area and a 50 m buffer.

- 1.3.6 As most of the construction works are of short duration and temporary, direct impacts on watercourses have been avoided and water vole tend to use only immediate terrestrial habitat around the watercourse, it was considered that a 50 m buffer was suitable when considering potential direct and indirect impacts on water vole from the Proposed Development.

Contextual Data

- 1.3.7 Owing to the iterative design process of the Proposed Development, some surveys were undertaken further than 50 m from the Onshore Infrastructure Area. These surveys may have been located within, or within the buffer of, previous iterations of the Onshore Infrastructure Area boundaries. Nevertheless, information from these surveys have been included in this technical report because they provide context regarding the ecological sensitivity of the wider area and to inform Volume 2, Chapter 1: Onshore Ecology and Nature Conservation of the ES (where relevant). Any contextual information (based on survey data collected from outside the survey area) is shown on **Figure 1.1** to **Figure 1.12**.

1.4 Relevant Legislation

- 1.4.1 There are two key pieces of legislation that protect otter under UK law. These are the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2017.
- 1.4.2 Under the Conservation of Habitats and Species Regulations 2017, otter are listed under Schedule 2. As such, they are a European protected species. This makes it an offence to:
- deliberately capture, injure or kill an otter;
 - deliberately disturb an otter; or
 - damage or destroy a breeding site or resting place of an otter.
- 1.4.3 Otter are listed in Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). As such, under Section 9 of this Act it is an offence to:
- intentionally or recklessly disturb an otter while it is occupying a structure or place, which it uses for that purpose; or
 - obstruct access to a place of shelter or protection.
- 1.4.4 Two key pieces of legislation are relevant for water vole under English law: the Wildlife and Countryside Act 1981 and the Natural Environment and Rural Communities Act 2006.
- 1.4.5 Water vole are listed in Schedule 5 of the Wildlife and Countryside Act 1981. As such, under Section 9 of this Act it is an offence to:
- intentionally kill, injure or take a water vole;
 - possess or control any live or dead specimen or anything derived from a water vole;
 - intentionally or recklessly damage, destroy or obstruct any structure or place used for shelter or protection by a water vole; or

- intentionally or recklessly disturb a water vole while occupying a structure or place which it uses for that purpose.

1.4.6 Water vole are in the list published by the Secretary of State, as is required by Section 41 of the Natural Environment and Rural Communities Act 2006. As such, it is a species of principal importance (first identified as priority habitats and species in the UK Biodiversity Action Plan).

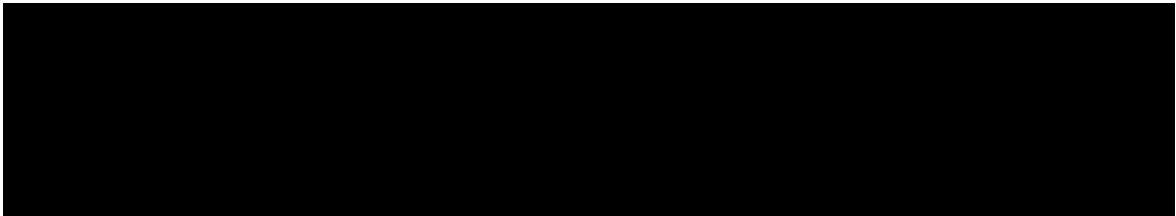
1.4.7 Schedule 9 of The Wildlife and Countryside Act, 1981 makes it illegal to distribute or allow the release of American mink (*Neogale vison*) into the wild. American mink are described as a voracious predator of water vole.

1.5 Methodology

Field Survey

1.5.1 Surveys of all areas along the Onshore Infrastructure Area were undertaken by a suitably experienced Ecologist. Visits were undertaken during summer and autumn 2022.

1.5.2



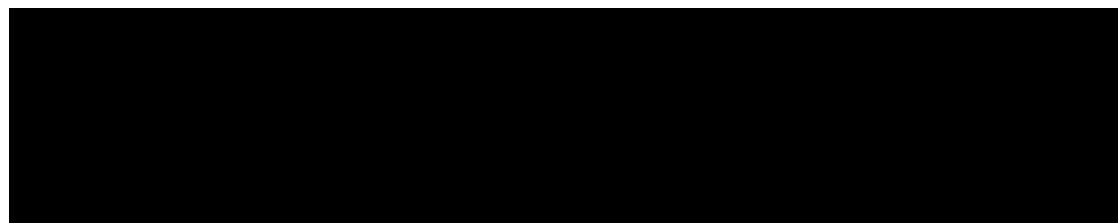
1.5.3 The following are features/field signs used to identify the presence of otter.

- Holts – a structure often used as a breeding nest by otter. Unlikely to be permanently occupied but may be occupied for prolonged periods if young are present.
- Couches/hovers are more temporary resting places.
- Otter spraint is characteristic otter droppings used to mark important features along otter territories. Often placed near bridges crossings.
- Feeding remains – characteristically stripped fish carcasses.
- Slides are sometimes identified where otter regularly enter watercourses via a characteristic “slide”.
- Footprints are also sometimes left in locations where they remain identifiable.

Limitations

1.5.4 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation can ensure the complete characterisation and prediction of the natural environment.

1.5.5



Accurate Lifespan of Ecological Data

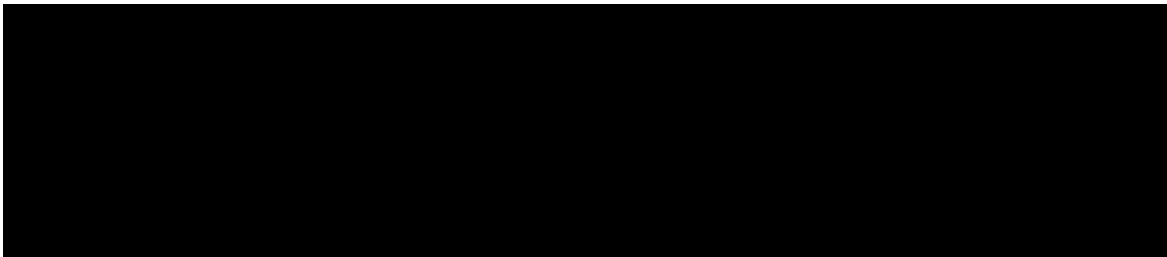
- 1.5.6 The majority of ecological data remains valid for only short periods due to the inherently transient nature of the subject. The survey results contained in this report are considered accurate for two years, assuming no significant considerable changes to the site conditions. It is possible that mobile species such as otter may create and occupy new places of rest or abandon previously used places of rest quite frequently.
- 1.5.7 Site specific surveys used to inform Volume 2, Chapter 1: Onshore Ecology and Nature Conservation of the ES were undertaken between 2021 and 2024. CIEEMs Advice Note: On the lifespan of ecological reports and surveys (CIEEM, 2019) recommends that surveys exceeding three years in age are likely to require updating, whilst surveys undertaken between 18 months and three years prior to application may require site visits pre-construction to review the validity of survey findings. Therefore, in accordance with CIEEM guidance (CIEEM 2013a and 2013b), site specific surveys undertaken over 18 months prior to the submission will be updated, where required (following a site review to confirm the validity of survey findings by a suitably qualified ecologist). Those surveys undertaken over three years will be supplemented by further surveys (if the Development Consent Order is granted) to be completed pre-construction.

1.6 Site-specific Surveys

Otter and Water Vole

- 1.6.1 The results of the otter and water vole surveys are presented in **Figure 1.1** to **Figure 1.12** of this report and summarised below.

1.6.2



1.6.3

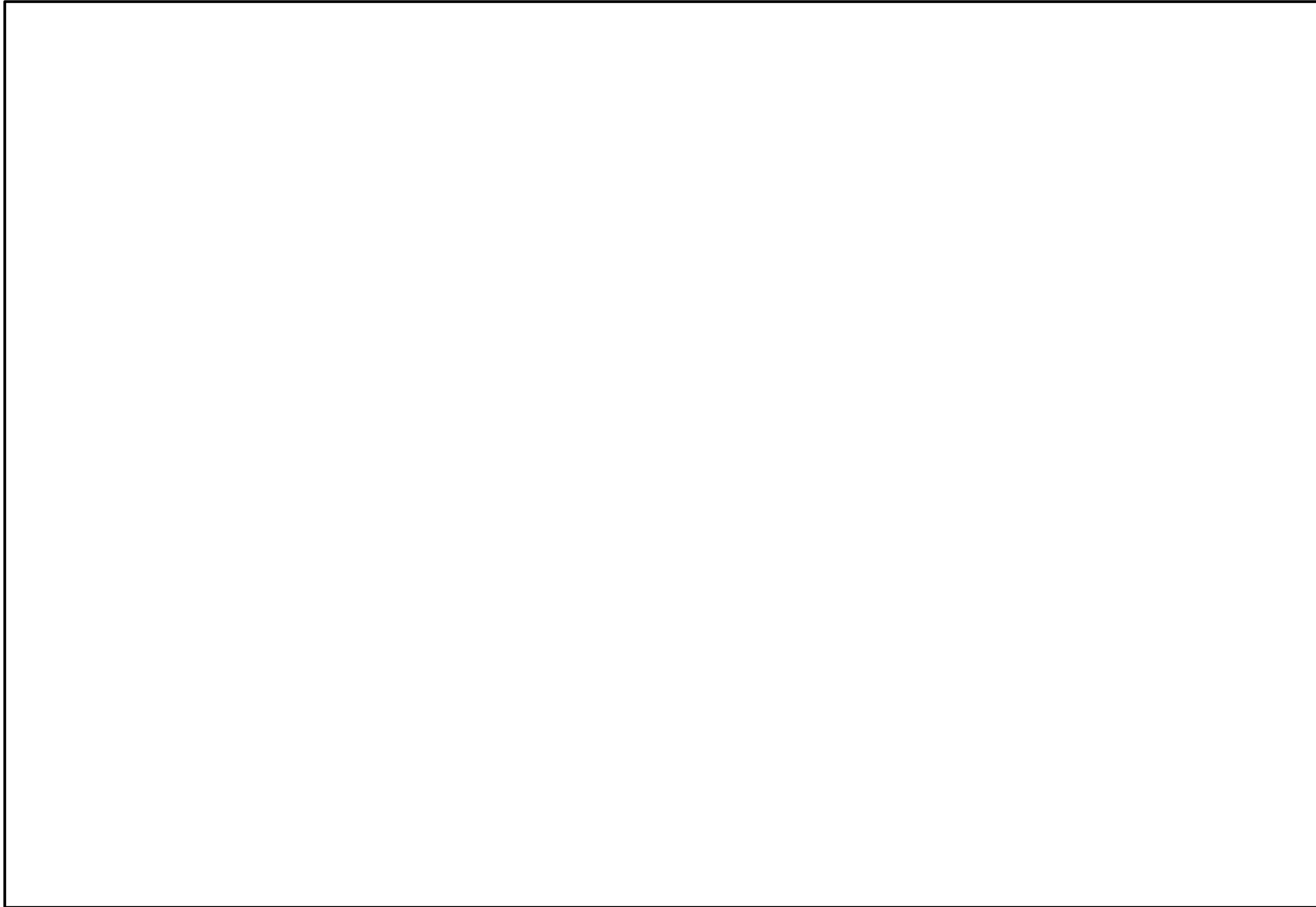


Figure 1.1: Results of the otter and water vole surveys (sheet 1) (removed – confidential information)

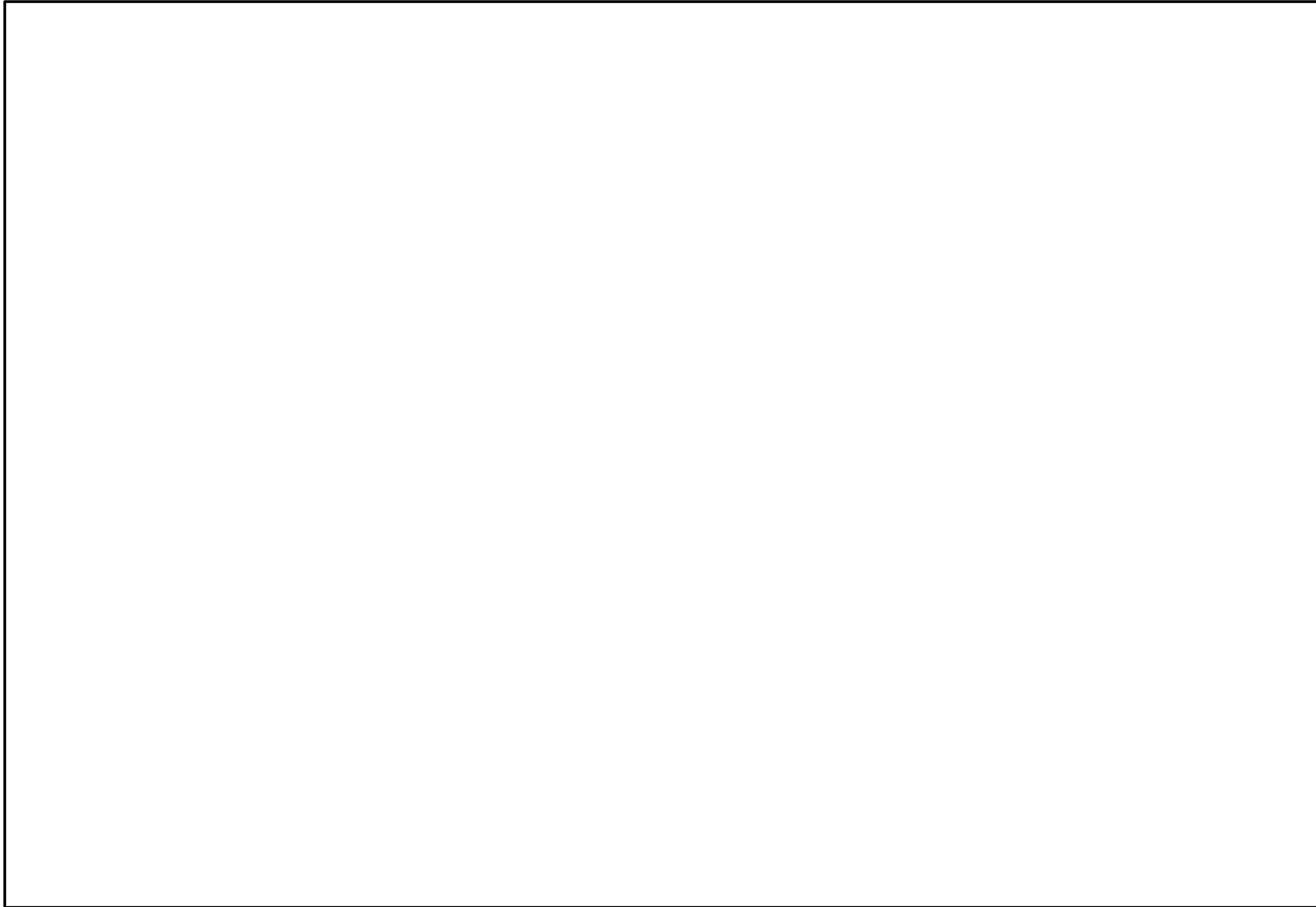


Figure 1.2: Results of the otter and water vole surveys (sheet 2) (removed – confidential information)

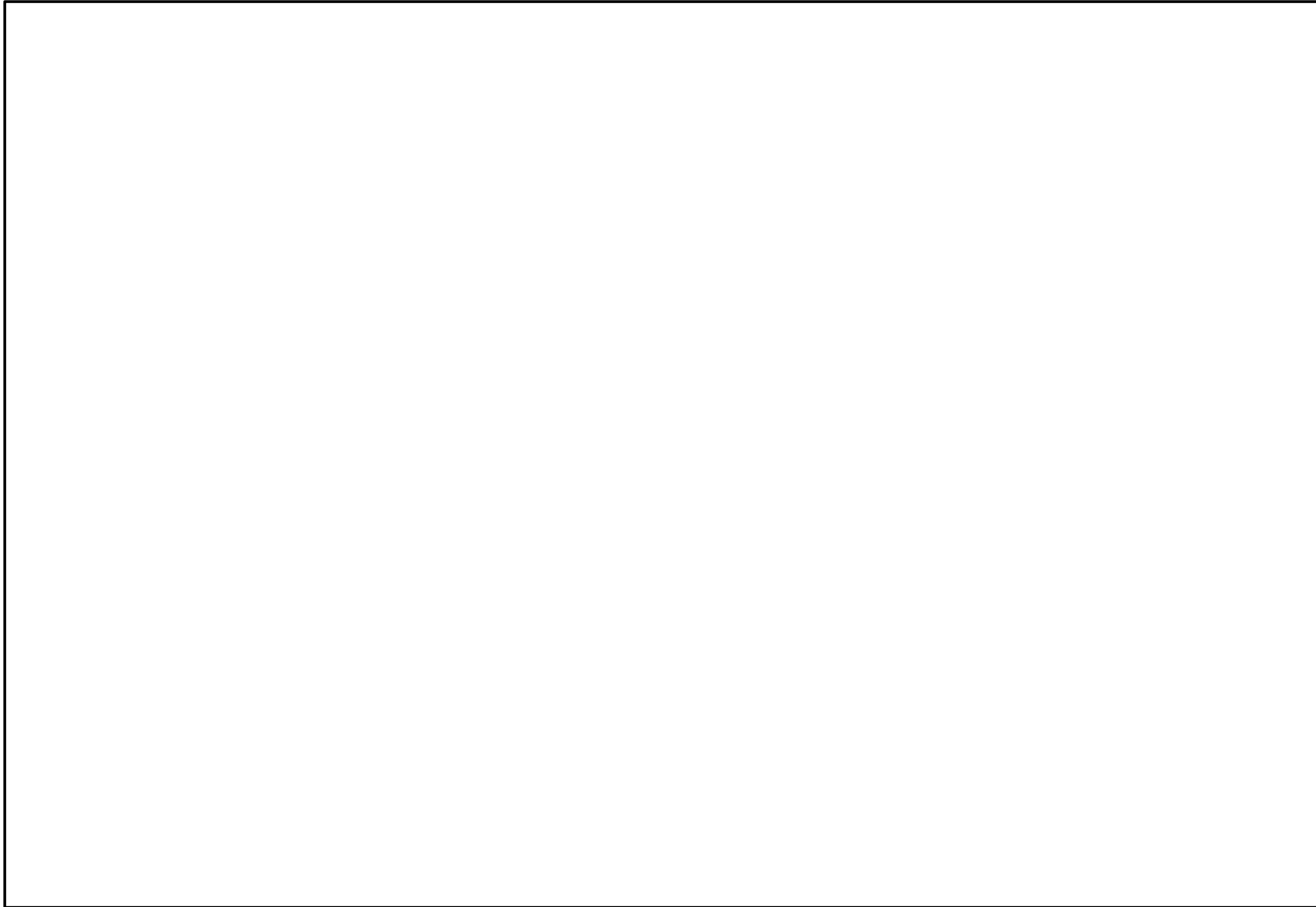


Figure 1.3: Results of the otter and water vole surveys (sheet 3) (removed – confidential information)

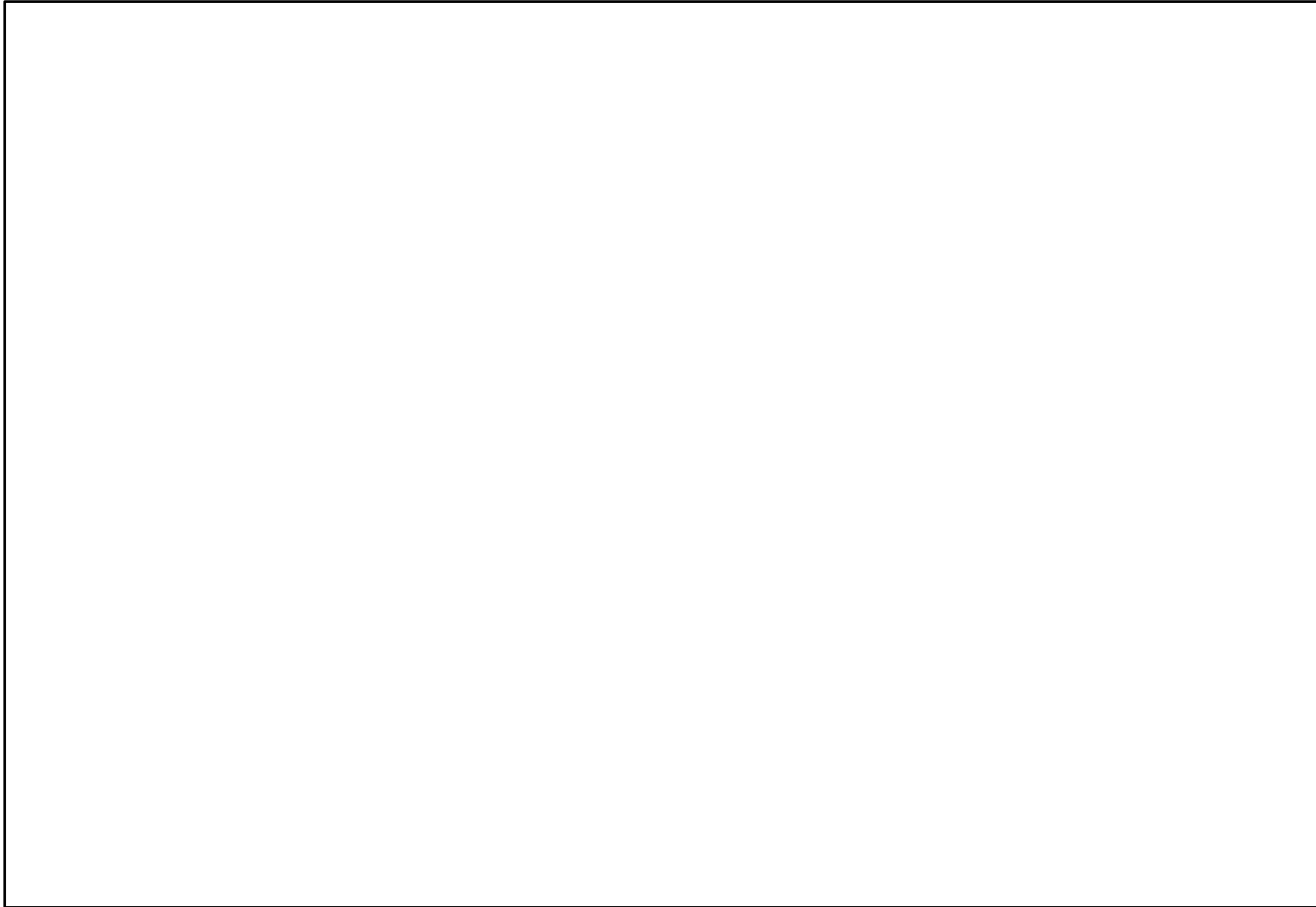


Figure 1.4: Results of the otter and water vole surveys (sheet 4) (removed – confidential information)

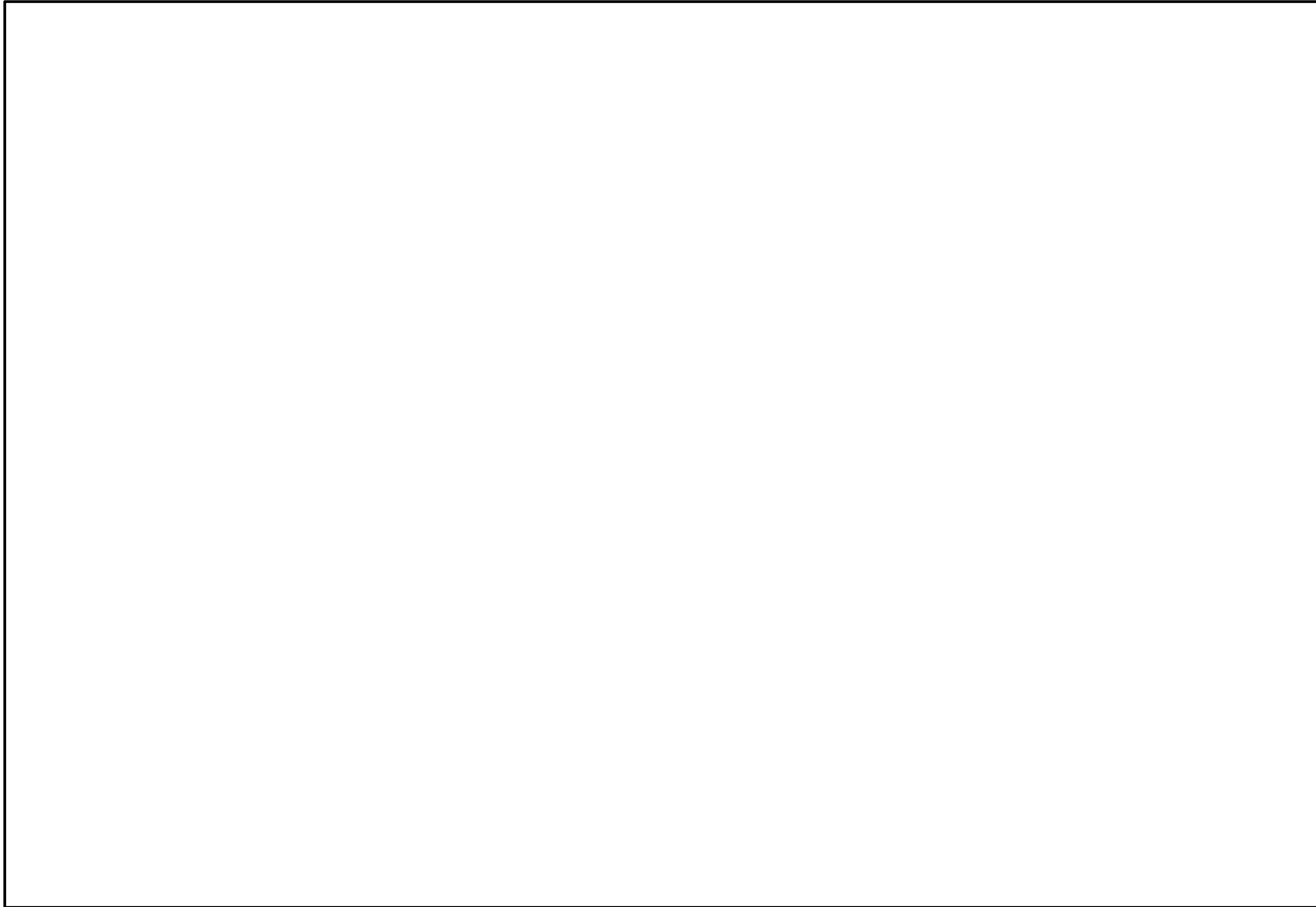


Figure 1.5: Results of the otter and water vole surveys (sheet 5) (removed – confidential information)

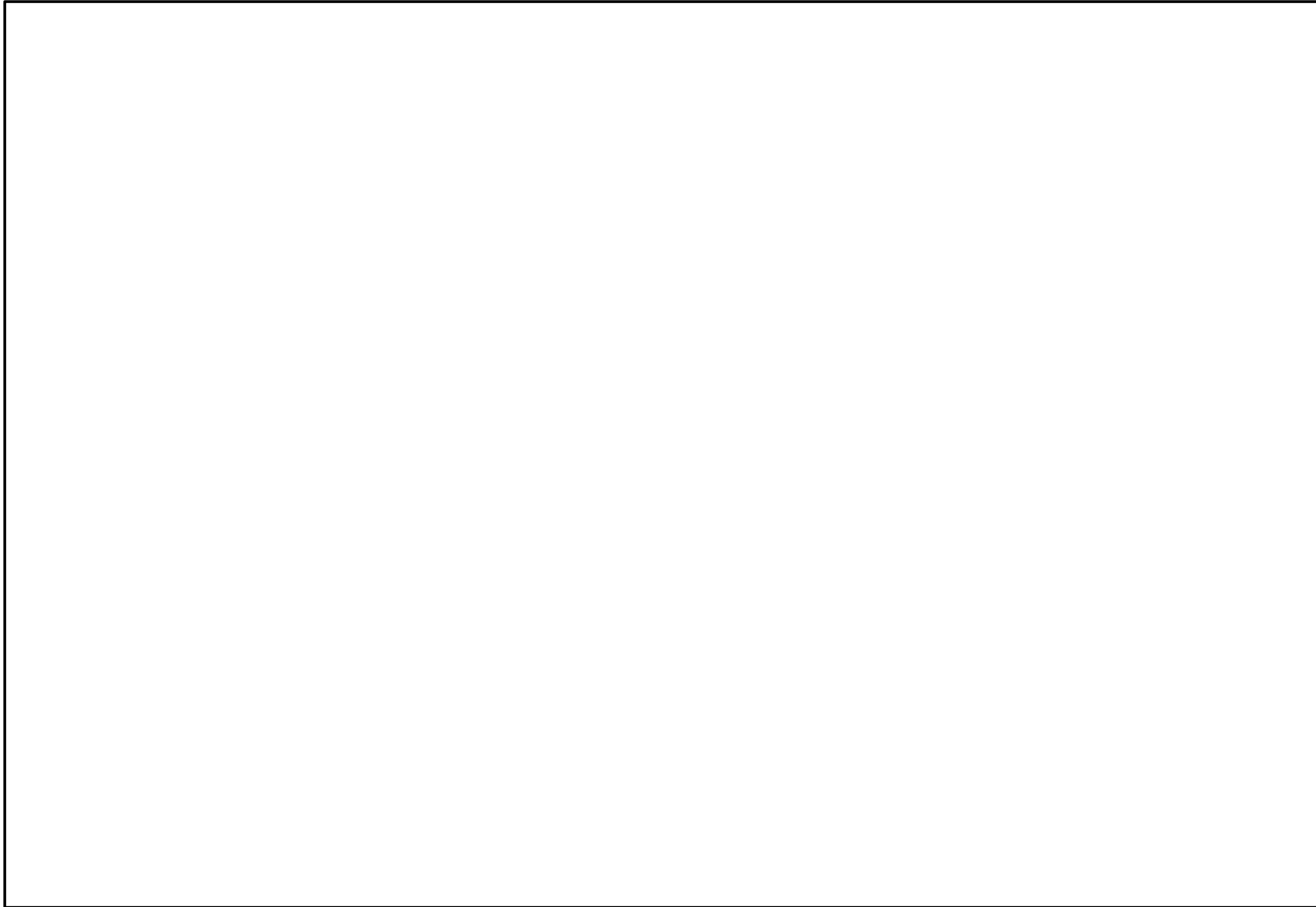


Figure 1.6: Results of the otter and water vole surveys (sheet 6) (removed – confidential information)

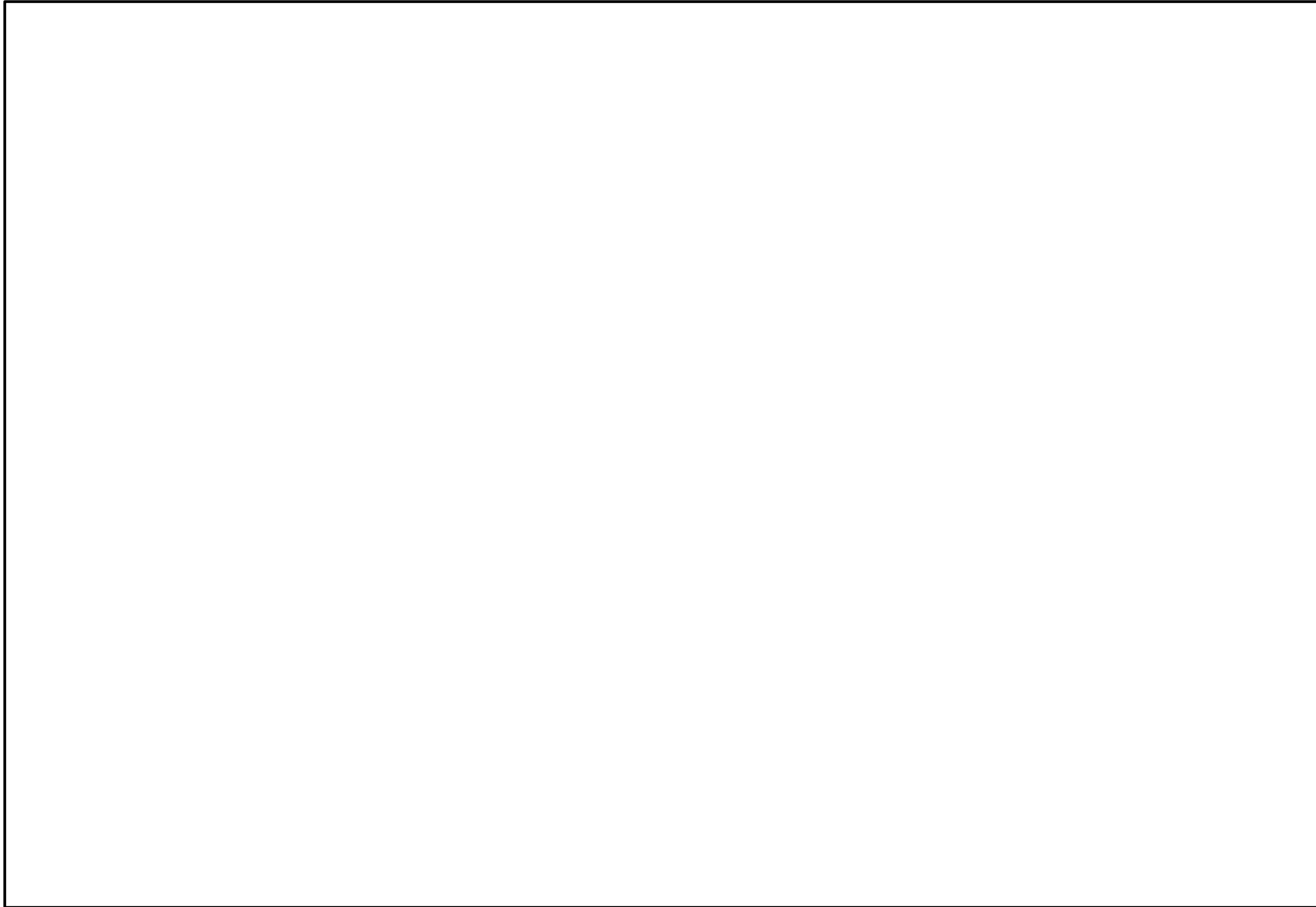


Figure 1.7: Results of the otter and water vole surveys (sheet 7) (removed – confidential information)

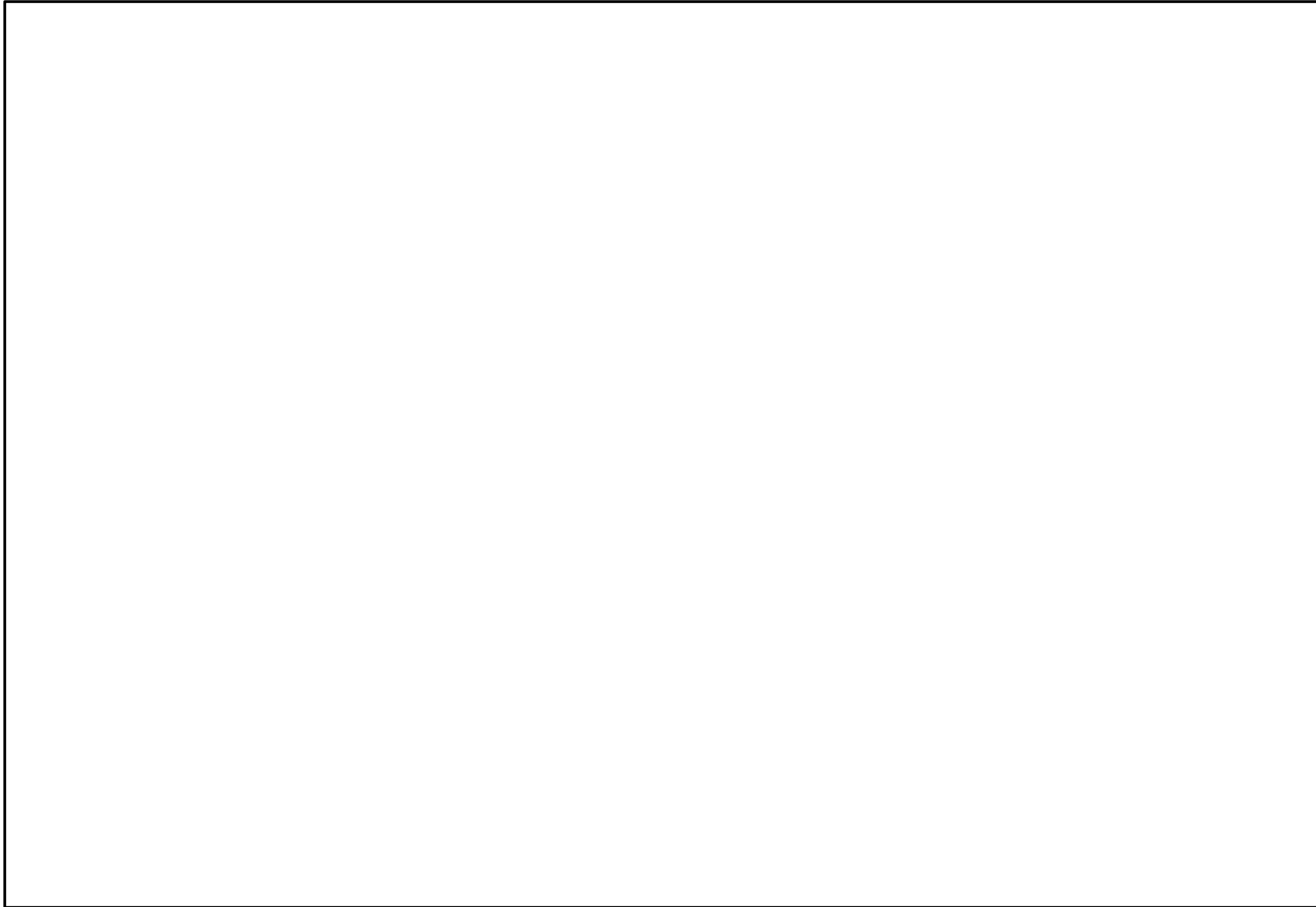


Figure 1.8: Results of the otter and water vole surveys (sheet 8) (removed – confidential information)

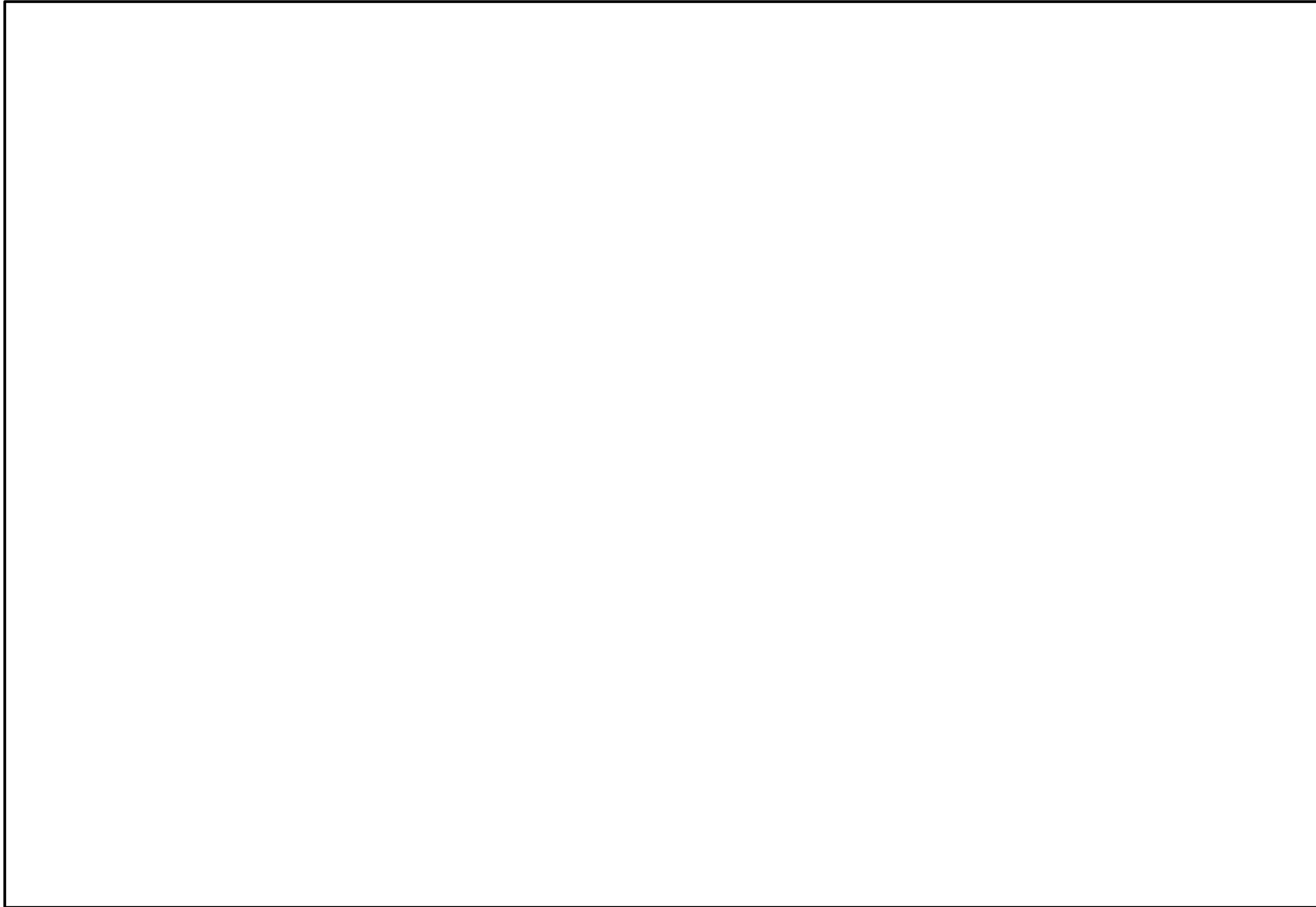


Figure 1.9: Results of the otter and water vole surveys (sheet 9) (removed – confidential information)

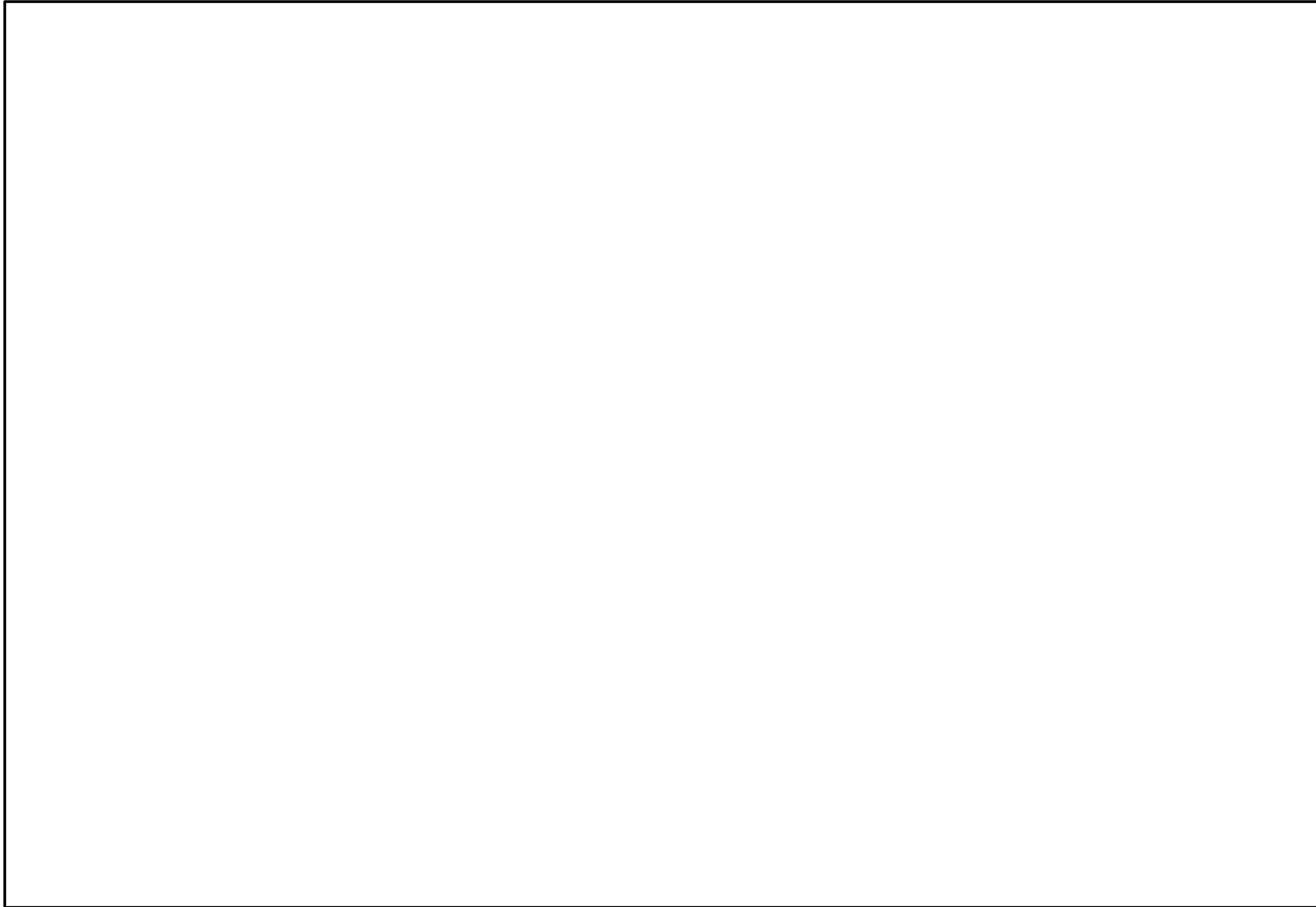


Figure 1.10: Results of the otter and water vole surveys (sheet 10) (removed – confidential information)

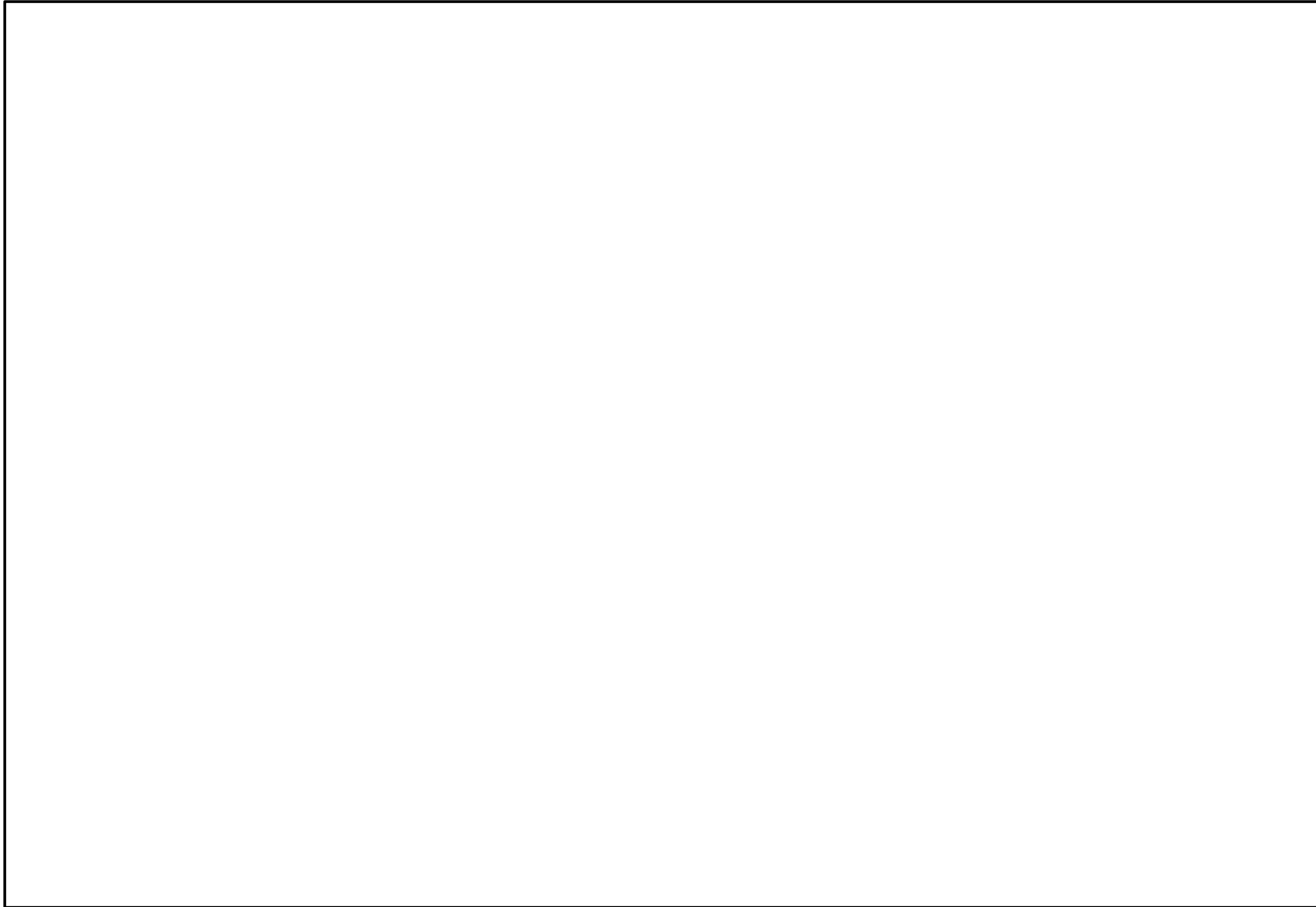


Figure 1.11: Results of the otter and water vole surveys (sheet 11) (removed – confidential information)

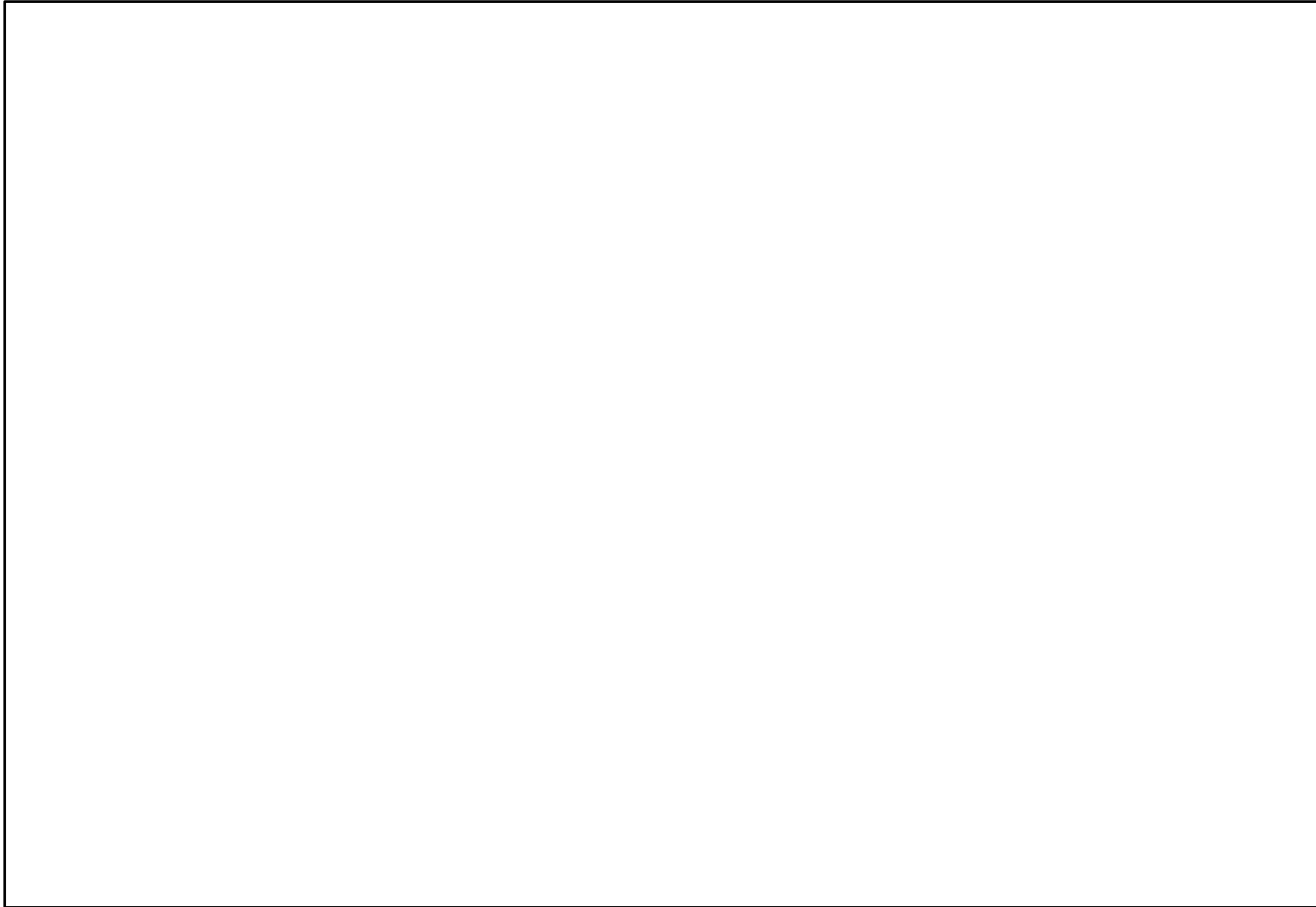


Figure 1.12: Results of the otter and water vole surveys (sheet 12) (removed – confidential information)

1.7 Summary

Conservation Status of Otter

- 1.7.1 Otter in England are protected under the Wildlife and Countryside Act 1982 (as amended). They are also listed as a priority species in the UK Post 2010 Biodiversity Framework and protected under the Conservation of Habitats and Species Regulations 2017.

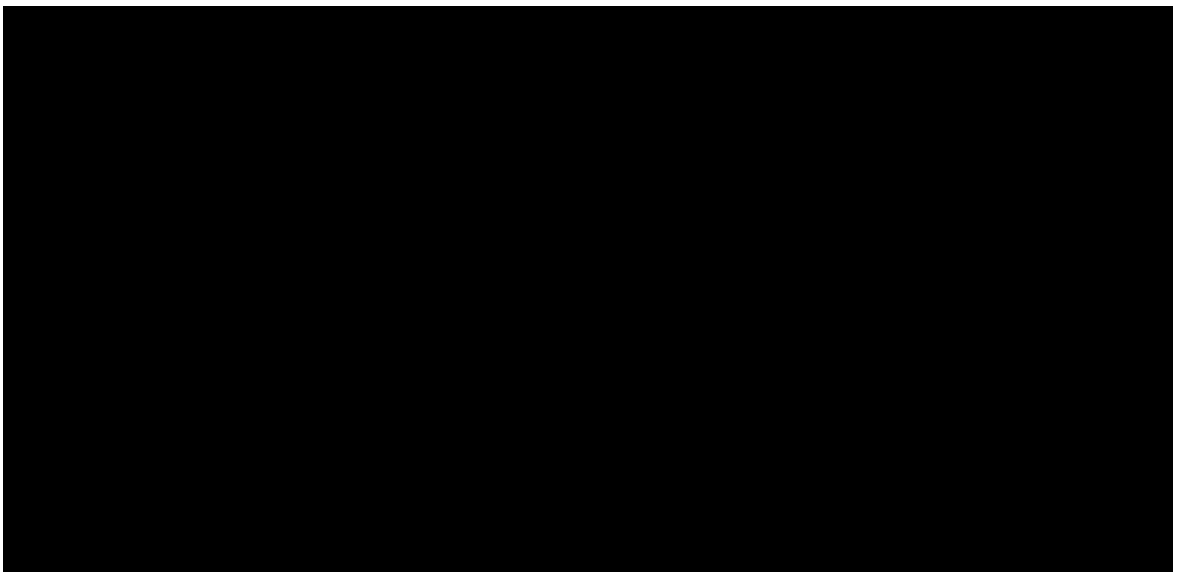
Status of Otter in the Vicinity of the Proposed Development

1.7.2

1.7.3

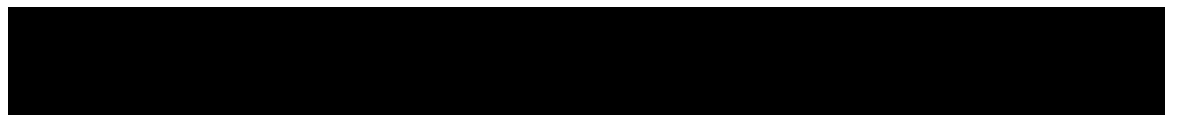
1.7.4

1.7.5



Status of Water Vole

1.7.6



- 1.7.7 Prior to commencement of construction, an update survey of water vole would be undertaken in conjunction with the otter surveys detailed in **paragraph 1.7.4**.

1.8 References

CIEEM (2013a) Competencies for Species Survey: Eurasian Otter. CIEEM Technical Guidance Series.

CIEEM (2013b) Competencies for Species Survey: Water Vole. CIEEM Technical Guidance Series.

CIEEM (2019) On The Lifespan Of Ecological Reports & Surveys. Advice Note.

Dean M, Strachan R, Gow D, and Andrews R (2016) The Water Vole Mitigation Handbook. Mammal Society Mitigation Guidance Series.

Strachan R, Moorhouse T, and Gelling M (2011) Water Vole Conservation Handbook. WildCRU, Oxford.